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## **TIMEX SINCLAIR USERS GROUP MILE HIGH CHAPTER**

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MAY 1987 \* CONJUNCTION OF VENUS AND JUPITER, ON THE 4th & 5th \*

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\*\* MEETINGS HAVE BEEN MOVED TO \*\*\*\*\* THE FOURTH THURSDAY \*\*\*\*\*  
This month's meeting is on the 28th, at 7:30 PM. See above  
for address and phone number.

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This newsletter is prepared on MSCRIPT-5 in 64 column mode.

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This newsletter is exchanged with many other Timex/Sinclair  
User Groups around the country. This exchange is a primary  
source of new information.

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This past week I had a long phone conversation with Al Gedris  
of the Ohio Timex group (RAMTOP). We are now exchanging  
newsletters, and Al is sending one of their library tapes in  
exchange for some of our library programs. As soon as it  
arrives I will begin uploading to the BBS and it will be  
available for copying at the regular meetings.

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We are also now exchanging newsletters with the Chicago Area  
Timex User Group (NITE-TIME NEWS). The March Issue has a review  
of the SAGA ELITE keyboard for the 2068 (actually made for the  
Spectrum). It's about \$100 depending on the exchange rate with  
England.

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According to the April PLOTTER there is a bug in the TiMachine  
BASIC compiler.

You will only encounter it if you are compiling very large  
programs and have to use the "XD" and "XE" instructions.

After the program has loaded (while the backup prompt is still  
on the screen), delete the left quote and hit STOP.

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Add the following lines to BASIC (2068):

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20 FOR i = 1 TO 4
21 READ address, N
22 FOR j = 0 TO n-1
23 READ byte: POKE address + j, byte
24 NEXT j
25 NEXT i
100 DATA 26834, 4
101 DATA 205, 0, 130, 0
102 DATA 32070, 4
103 DATA 205, 0, 130, 0
104 DATA 32858, 4
105 DATA 205, 71, 104, 0
106 DATA 33280, 12
107 DATA 17, 0, 0, 205, 71, 104, 192, 237, 91, 241, 68, 201
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Now, type GOTO 8000 and ENTER to make a backup copy.

I now have a copy of ZTERM-64 (\$29.95), the modem program which works with the OS-64 module (\$29.95). From ZEBRA SYSTEMS INC., 7B-06 Jamaica Ave., Woodhaven NY 11421. Write for a catalog if you don't have one already.

It comes with 24 well written pages of basic instructions but leaves a number of unanswered questions (and 1 mystery). I have spoken to ZEBRA by telephone and will cover it at the end of this review. NOTE: They are very helpful and try their best to answer your questions.

It is so nice to see 64 cols on the screen instead of 32, but the status reports stay on-screen ALL the time so there are only 16 lines (1024 chars instead of 704). Good for straight text but bad for page oriented text (like menus) which expect 22-25 lines (one local BBS normally has the "MENU SELECT" on line 17 or 18).

The program is quite easy to use; the menus are straight forward and self-explanatory. There's even a center-fold in the manual showing all of the menus and their hierarchy.

All of the protocols, and buffer status, are displayed and menu selectable.

There is a "TYPE INTO BUFFER" option which allows you to enter text into the buffer while off-line. Unfortunately this will NOT allow you to edit what is already in the buffer. However, it will not over-write anything that is already in the buffer.

It's a simple procedure to insert 14 names (25 chars each) & phone numbers (30 chars each), and 10 macros (52 chars each). These can be SAVED with the program, or separately so that you can have several files of numbers. There is an auto-redial and auto-answer.

The program can be set up to allow storage on cassette, A&J micro-drive, or ZEBRA floppy disk. Printer interface control is for AERCO, TASMAN A/B, and A&J (no 2040 printer).

The program will auto-size the 17000 byte buffer when you LOAD a file. The instructions state that SAVE/LOADs "are assumed to be code". You must exit to BASIC to handle BASIC programs, the auto-size works here also.

One excellent feature (for us klutzes) is that when you hit ERASE BUFFER, it asks if you really want to do that.

Capshift-8 provides a pop-DOWN menu (lines 22 & 23) in terminal mode to control buffer, printer, macro xmit, and the usual (H)ang up, (P)ickup, and (M)odem.

Capshift-1 is the CTL key. The word "CONTROL" appears in the lower left corner of the screen, and the program waits for the next key press.

Now for the really good part. It has X-MODEM send/receive which is tied to your I/O devices. SEND will ask if you want to xmit what is in the buffer, on the disk, or "user defined device" (that's the mystery I mentioned). RECEIVE will ask if the download is to go to the buffer, screen/printer, disk, or "user defined device".

It's a real pleasure to hit the X-MODEM send or receive button and watch the BUFFER numbers click over. Everytime they change I know that another block of my file xfer is getting thru intact.

ZTERM-64 is a real improvement over MTERM (understatement) and a pleasure to use.

And now, the solution to the mystery. The "USER DEFINED DEVICE" code is tied to the OPEN# and CLOSE# code in the 2068, along with a address table. It was intended that MC routines could be installed for control of other I/O devices (such as the AERCO DD or the A&J microdrive). Unfortunately, it has not been fully documented and therefore is impossible to implement unless you are a real MC wizard. Right now, it's a promise for the future but if there is enough demand they'll get busy on it.

Some additional information which I have requested from ZEBRA:

How to change the redial interval (it wants to redial immediately)? Is there any way to change A&J drives without going to BASIC? How to change the number of rings before auto-answer (it's 4, the same as my answering machine)? How many times will X-MODEM repeat a block (I know there's supposed to be a standard)? What is supposed to happen when it runs out of repeats? The one time it happened to me the keyboard locked up, all I could do is turn off the computer.

Little details like this would be helpful in the manual.

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#### FOR T/S 1000 USERS:

A SCRAM (static CMOS ram) board is soon to be released by Silicon Mountain Computers. It will be similar to the old HUNTER BOARD.

The same company is releasing SRAM HI\*REZ EXTENDED BASIC which will add 38 new commands and allow hi-rez BASIC commands and 64 (count them) columns.

See the MAY '87 issue of Computer Shopper for more details.

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In the April ZX-APPEAL (Vancouver BC): John Brohman reports that he ran the TAPE-OUT on his computer to a small FM transmitter and then ran the earphone jack on a receiver to the TAPE-IN on a second machine. Worked like a charm. Wireless modem (sorta). It would be an excellent way to make multiple copies of a program at club meetings, just bring your computer and an FM radio.

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From the Feb. ZX-APPEAL: By Glenn Read.

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There is a large quantity of software available for the ZX-81/TS100 but it is not often that software changes to the 8k ROM itself are made available.

Thomas J. Bent has done exactly that with his 8k ROM upgrade of the Sinclair operating system.

The upgrade consists of a new 8k ROM and a thorough documentation package. Changes in the new ROM are catagorized in two sections:-

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1. New features.
2. Fixes to existing bugs.

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Some of the more useful new features of the upgrade involve speed increases such as a fast initialization on power-up that gives a faster time to the 'K' cursor even with just 16K RAM, for 64K users there should be an impressive improvement.

The second speed change is making all command line entries automatically in fast mode, even if you were previously in slow or display mode. As soon as a command line is entered it will switch to fast.

Other improvements to existing functions speeds are a faster scroll and changes made to the display system so when you do a

CLS , the screen is cleared without the painfully slow collapsing of the display file.

There have been changes made to the tape load routine so if there is a bad load, the machine is reset as if you had used NEW. This is supposed to clear memory much more elegantly than the existing system.

One very useful change enables you to create very large arrays (no, not the radio telescope type).

Finally, there has been a number of changes to the character display; the Q,W,V,K,O, and O have all been tidied up and the pound sign has been replaced with an apostrophe. This last change I have found not so useful as I use my '81 for circuit design and documentation, and it is an international standard to designate Negated logic levels with the pound sign. The mathematical/logical overscore being very difficult to print unless you own a laser printer.

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No more Bugs:-

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Existing bugs that have been fixed are the LPRINT nuisance and DIVIDE bugs - the nature of those bugs are covered in detail in the documentation for those who are fortunate enough not to have come across them.

The documentation gives listings of the machine code changes made and each of the improvements are also fully covered.

Overall, I found the changes very useful especially to the programmer; but mostly it illustrates what can be done with some perseverance to make changes to the operating itself. I hope this review has given some insight to this upgrade and look forward to further upgrades in the future. Hi res' and built in fast load perhaps (hardware group - hint, hint).

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Till next month ----- FRANK

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